

WHAT IS CLAIMED IS:

1. An in-plane switching mode LCD device comprising:

first and second substrates;

gate and data lines defining a pixel region on the first

5 substrate;

a plurality of common and data electrodes formed to cross  
one another within the pixel region at constant intervals;

a common line formed in parallel with the gate line, the  
common electrodes being diverged from the common line;

10 a thin film transistor formed in a crossing portion of  
the gate and data lines; and

a liquid crystal layer formed between the first and  
second substrates,

wherein the data electrodes are connected with the thin  
15 film transistor at one side and the data electrodes overlap  
the common line at a minimum area so as not to affect electric  
field generated between the common electrodes and the data  
electrodes.

20 2. The in-plane switching mode LCD device of claim 1,  
wherein the common electrodes include a first common electrode  
formed in parallel with the data line and diverged from the  
common line within the pixel region; a second common electrode  
formed with at least one data electrode interposed between the

first common electrode and the second common electrode in parallel with the first common electrode and diverged from the common line; and a third common electrode formed with at least one data electrode interposed between the second common electrode and the third common electrode, having one end connected with one end of the second common electrode.

3. The in-plane switching mode LCD device of claim 2, wherein the data electrodes include a first data electrode having one side connected with the thin film transistor and the other side extended to an upper portion of the common line, and a second data electrode formed between the second common electrode and the third common electrode and connected with the first data electrode at the upper portion of the common line and with the one side of the first data electrode.

4. The in-plane switching mode LCD device of claim 3, wherein the first and second data electrodes on the common line are separated from each other.

5. The in-plane switching mode LCD device of claim 1, wherein the data electrode overlapped with the common line has edge portions selectively located inside and outside the common line.

6. The in-plane switching mode LCD device of claim 5,  
wherein the inside and outside locations of the edge portions  
depend on a rubbing direction.

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7. The in-plane switching mode LCD device of claim 5,  
wherein the edge of the data electrode located inside the  
common line is further from the edge of the common line than  
the edge of the data electrode located outside the common  
line.

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8. The in-plane switching mode LCD device of claim 1,  
wherein the data electrodes have one side connected with the  
thin film transistor and the other side overlapped with the  
common line.

9. The in-plane switching mode LCD device of claim 1,  
wherein the data electrodes have one side connected with the  
thin film transistor and the other side overlapped with the  
common line and the gate line.

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10. An in-plane switching liquid crystal display device,  
comprising:

a plurality of parallel data lines;



of a vertex of the intersection of the common electrodes and the common line is rounded; and

wherein at least one corner portion of a vertex of a connecting point of the second ends of the data electrodes and the transverse data electrode is substantially rounded

12. The in-plane switching liquid crystal display device of claim 11, wherein the first portion of the transverse data electrode corresponds to the at least one corner portion of the vertex of the intersection of the common electrodes and the common line.

13. The in-plane switching liquid crystal display device of claim 12, further comprising a transverse common electrode connected to second ends of the common electrodes, wherein at least one corner portion of a vertex of the intersection of the common electrodes and the transverse common electrode is rounded.

14. The in-plane switching liquid crystal display device of claim 13, wherein the second ends of the data electrodes connect to a second transverse data electrode, the second transverse data electrode having a third portion having a

third width and a fourth portion having a fourth width,  
wherein the third width is less than the fourth width.

15. The in-plane switching liquid crystal display device  
5 of claim 14, wherein the third portion of the second  
transverse data electrode corresponds to the at least one  
corner portion of the vertex of the intersection of the common  
electrodes and the transverse common electrode.

10 16. An in-plane switching liquid crystal display device,  
comprising:

a plurality of parallel data lines;

a plurality of gate lines, crossing the data lines, such  
that a pixel region is defined by the data and gate lines;

15 a thin film transistor comprising source, drain and gate  
electrodes formed at a crossing point of the data and gate  
lines;

a common line within the pixel region;

a plurality of common electrodes extending in a direction  
20 perpendicular to the common line;

a plurality of data electrodes parallel to the common  
electrodes, first ends of the data electrodes connected to the  
drain of said thin film transistor, the data electrodes and  
the common electrodes forming an alternating pattern; and

a transverse data electrode overlying the common line and connecting respective ends of the data electrodes;

wherein a first distance between an edge of the transverse data electrode in a first region and an edge of the common line in the first region is greater than a second distance between the edge of the common line in a second region and the edge of the transverse data electrode in the second region.

17. The in-plane switching liquid crystal display device of claim 16, wherein the first distance is greater than the second distance by 50%.

18. The in-plane switching liquid crystal display device of claim 16, wherein the first distance is sufficiently large so that the disclination is substantially removed.

19. An in-plane switching liquid crystal display device, comprising:

a plurality of parallel data lines;  
a plurality of gate lines, crossing the data lines, such that a pixel region is defined by the data and gate lines

a thin film transistor comprising source, drain and gate electrodes formed at a crossing point of the data and gate lines;

a common line within the pixel region;

5 a plurality of common electrodes extending in a direction perpendicular to the common line;

10 a plurality of data electrodes parallel to the common electrodes, the data electrodes and the common electrodes forming an alternating pattern, each of the data electrodes having a first end, a main part and a second end, the first ends electrically connected to the drain of said TFT, the main parts having a first width, at least one of the respective second ends overlying the common line and having a second width, the at least one second end having at least one edge overlapping an edge of the common line, the first width being  
15 less than the second width; and

a transverse data electrode overlying the common line and connecting second ends of the data electrodes, the transverse data electrode having a first portion having a first width and  
20 a second portion having a second width, wherein the first width is less than the second width;

wherein the first width is sufficiently narrow that disclination is removed.



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